

REMARKS

Favorable consideration of this Application in light of the following discussion is respectfully requested.

Claims 1 and 3-15 are pending in the present Application. No new matter has been added.

By way of summary, the Official Action presents the following issues: Claim 1 stands rejected under 35 U.S.C. § 102 as being anticipated by Ko et al. (U.S. Patent No. 6,574,189, hereinafter Ko); and, Claims 3-5 stand rejected under 35 U.S.C. § 103 as being unpatentable over Ko in view of Mukawa et al. (U.S. Patent No. 5,745,451, hereinafter Mukawa).

REJECTION UNDER 35 U.S.C. § 102

The outstanding Official Action has rejected Claim 1 under 35 U.S.C. § 102 as being anticipated by Ko. The Official Action contends that Ko discloses all of the Applicants' claim limitations. Applicants respectfully traverse the rejection.

Amended Claim 1 recites, *inter alia*, a recording medium housed in a cartridge, including:

... a slider configured to open and close said second detection hole and, when said second detection hole is in a closed state, forming a plane substantially horizontal level with the reference plane of said cartridge at the position of said second detection hole and said first detection hole is in an open state at all times,

wherein the slider includes a portion altering the depth of the first detection hole with respect to the reference plane upon closing said second detection hole. (emphasis added)

Ko describes a cartridge assembly for detecting when a disc has been withdrawn from the cartridge.¹ As shown in Fig. 12, a disc cartridge includes a lower shell (120) and an upper shell (130), which make up the cartridge case. As shown in Fig. 8, the cartridge case includes

¹ Ko at column 11, lines 1-5.

openings (124) and (125) on a horizontal surface of the cartridge. Likewise, as shown in Fig. 9, the cartridge includes openings (148) on a vertical side surface of the cartridge. As shown in Fig. 12, a cap (124a) is disposed at sensor opening (124). The presence of the tap indicates that the disc has not been withdrawn from the cartridge. In this state, the opening (124) remains closed.² Only upon removal of the tap (124a) is the closing member (152) able to move. Once moved, the hole (125) is opened.³ As shown in Figs. 13b-13c, once the tap (124a) is removed, an angular space is provided in the member (152). As shown in these figures, sensor switches (160 and 170) are able to access a vertical wall of the cartridge.

In the Official Action, dated May 2, 2006, a first detection hole of Ko is identified as A1 sensor hole (124). A second detection hole is identified as A3 sensor hole (125). A slider is identified as corresponding to opening/closing member (152). Likewise, an altering in the depth of the first detection hole, upon closing the second detection hole, is identified as annular space (153).⁴

Conversely, in an exemplary embodiment of the Applicants' invention, a cartridge-type recording medium includes, at least, a first detection hole and a second detection hole. The slider of the cartridge is configured to open and close the second detection hole. When the second detection hole is in a closed state, the hole forms a plane substantially horizontal with the reference plane of the cartridge at the position of the second detection hole and the first detection hole. The first detection hole remains open at all times. When the second detection hole is closed by the slider, the slider provides a portion to the first detection hole for altering the depth of the first detection hole with respect to the reference plane upon closure of the second detection hole.⁵

² Ko at Figs. 12 and 13a.

³ Ko at column 13, lines 52-56.

⁴ The Official Action of May 2, 2006 at page 3.

⁵ Application at Figs. 10C, 10D, and 10E.

The Advisory Action of June 30, 2006, notes that the outstanding § 102 and § 103 rejections “rely on a disc having been once withdrawn from the cartridge, thus having caused the tap (124a) in Figure 13A to be permanently removed and the A1 sensor hole to be in a permanently opened state.”⁶ However, the description of Figs. 13A-13C make it clear that, removal of the tap (124a) is the only way by which A3 sensor hole (125) is opened. Thus, removal of the tap causes the identified “second detection hole (125)” to be opened, not closed, as recited in the Applicants’ claims. Likewise, the first detection hole identified in the Official Action as (124) cannot be said to be open at all times, as it is not opened at all times during operation in which the tap (124a) is present.⁷ As Ko does not disclose, or suggest, a slider, which provides a first detection hole in an open state at all times, nor a slider including a portion for altering the depth of a first detection hole with respect to the reference plane upon closing a second detection hole, Applicants respectfully request that the rejection of Claim 1 under 35 U.S.C. § 102 be withdrawn.

REJECTION UNDER 35 U.S.C. § 103

The Official Action has rejected Claims 3-5 under 35 U.S.C. § 103 as being unpatentable over Ko in view of Mukawa. The Official Action states that Ko discloses all of the Applicants’ claim limitations with the exception of sensor holes having specific purposes. However, the Official Action cites Mukawa as disclosing this more detailed aspect of the Applicants’ invention, and states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited references for arriving at the Applicants’ claims. Applicants respectfully traverse the rejection.

As discussed above, Ko does not disclose all of the claimed elements for which it has been asserted. Likewise, Mukawa does not remedy the deficiency discussed above.

⁶ Advisory Action at page 2.

⁷ Ko at column 13, lines 49-56.

Accordingly, neither Ko alone, or in combination with Mukawa, disclose or suggest the Applicants' claimed invention. Accordingly, Applicants respectfully request that the rejection of Claims 3-5 under 35 U.S.C. § 103 be withdrawn.

CONCLUSION

Consequently, in view of the foregoing amendment and remarks, it is respectfully submitted that the present Application, including active Claims 1 and 3-5, is patently distinguished over the prior art, in condition for allowance, and such action is respectfully requested at an early date.

Respectfully submitted,

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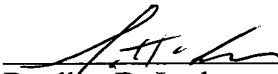
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